Methanol Cannon

(frequently done)

Purpose:

Combustion

Required Materials:

1 – Ring Stand Clamp 1 – Plastic Bottle 1-Tesla Coil

1 – Cork Stopper W/ string Attached 2 – Nails Methanol (1ml)

Procedure:

A plastic bottle is mounted onto a ring stand using a standard clamp. Two nails are pierced through the lower portion of the bottle near the bottom on the side. A cork is tied with a string to the ring stand. The opening of the bottle is positioned away from people or anything breakable. One milliliter of Methanol is added to the bottle through the opening, and the cork is placed firmly into the opening of the bottle.

A spark introduced to the closed container using the Tesla coil via the nails on the side. When the spark is formed the Methanol converts to Carbon Dioxide and a loud "Pop" is produced as the cork is forced from the bottle.

Reaction:

$$2CH_3OH + 3O_2 \rightarrow 2CO_2 + 4H_2O$$

Waste:

Let the bottle dry.

